Title (en)

METHOD FOR USE OF WATER WITH SWITCHABLE IONIC STRENGTH

Title (de)

VERFAHREN ZUR VERWENDUNG VON WASSER MIT UMSCHALTBARER IONENSTÄRKE

Title (fr)

PROCÉDÉ POUR L'UTILISATION D'EAU PRÉSENTANT UNE FORCE IONIQUE COMMUTABLE

Publication

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Application

EP 11848305 A 20111215

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Abstract (en)

[origin: WO2012079175A1] Methods and systems for use of switchable water, which is capable of reversibly switching between an initial ionic strength and an increased ionic strength, is described. The disclosed methods and systems can be used, for example, in distillation-free removal of water from solvents, solutes, or solutions, desalination, clay settling, viscosity switching, etc. Switching from lower to higher ionic strength is readily achieved using low energy methods such as bubbling with C02, CS2 or COS or treatment with Bronsted acids. Switching from higher to lower ionic strength is readily achieved using low energy methods such as bubbling with air, inert gas, heating, agitating, introducing a vacuum or partial vacuum, or any combination or thereof.

IPC 8 full level

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CPC (source: EP US)

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